

Date: Fri, 24 Dec 93 04:30:35 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #142
To: Ham-Homebrew

Ham-Homebrew Digest Fri, 24 Dec 93 Volume 93 : Issue 142

Today's Topics:

 - - television disruptor - -
 6 Meter (3 msgs)
 80 M DSB transceiver project
 Charging Deep-Cycle Batteries from Automobile
 funny reception on my amp (?)curious.
 Heathkit DX-60B Mod?
 Two meter monitor from NEW Radio Shack WX cube? (2 msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 22 Dec 1993 16:07:12 GMT
From: library.ucla.edu!agate!spool.mu.edu!darwin.sura.net!rsg1.er.usgs.gov!
news.cs.indiana.edu!noose.ecn.purdue.edu!ghg@network.ucsd.edu
Subject: - - television disruptor - -
To: ham-homebrew@ucsd.edu

In article <CIF8Ft.CEq@xetron.com> markm@xetron.com (Mark Malson) writes:
>In article <CIBMDI.MsI@eskimo.com> quixote@eskimo.com (Looking for Sancho)
writes:

>> The intended use of this device is to be put with a timer
>> against the wall where my new neighbor has his television set.
>

>If it's right up against the wall, you could get a really big magnet,
>like from a 12" woofer or bigger. You could make a large electromagnet
>too. Then, stand right at the closest point to his TV and move the
>magnet around a whole bunch. It should make his picture wave around

>enough to make him think he's sleepy or to just make him scratch his
>head.

>

>Fun to do to people's computer monitors too. And no FCC violation
>involved.

>

>- Mark Malson

> markm@xetron.com

>

Make a large coil of wire, 10 turns or so #16 or so size , cover your
entire wall which faces the enemy with this loop. Get a "variac"
(variable autotransformer from radio shaft or a ham fest). Connect
that to a 120V to 6V or 12V step down transformer. You need A/C,
not DC out.. If you cobble up an old battery charger, take out the
rectifier and go off the AC from the transformer secondary..

Turn up the juice slowly until the wire gets a little warm.. The
resultant magnetic field should affect CRTs for 20 feet or so
and will make them "flicker", as the shadow mask vibrates and
from direct effect on the electron beam. It is not powerful enough
to erase tapes, etc.

If all out war results, then you may have to resort to the following:

How about a 10' diameter coil of wire, such as lampcord (single conductor),
maybe 100-200 turns? You could probably get by with #22 or such, it
would be cheaper.. then pick up some surplus large high voltage
electrolytic Capacitors.. say 2000 mfd @ 450 VDC. Charge that baby off
some power supply, and discharge it into the coil. Make sure your TV, tapes,
credit cards, are at the far end of your house, or out in your car..

Then blast away.. It may magnetize the shadow mask in his TV (fill it
with rainbow colors), erase his credit & ATM cards and his tapes??
With 3-4 of these Caps in parallel, we are probably talking around
a million watt pulse (for approx 1 millisec).. might be good to fire
this off remote control..

--ghg

Date: 22 Dec 1993 19:51:44 -0700

From: europa.eng.gtefsd.com!howland.reston.ans.net!sol.ctr.columbia.edu!

hamblin.math.byu.edu!news.byu.edu!cwis.isu.edu!u.cc.utah.edu!

xmission.xmission.com!xmission.xmission.@@library.ucla.edu

Subject: 6 Meter

To: ham-homebrew@ucsd.edu

Hello everyone, I am thinking of building a 6M SSB Transciver. I would

like to know if this is a worthwhile project. I would mainly like to do it for the experience of doing it. I would like info of Schematics if possible, I could probably design one if pointed to the correct books, but would like to not do so if there is something out there that works well. I am a no-code Tech and would like to see if I can get some DX with my privs. I haven't had time to learn code yet so just want something to play with but would like a good radio to use in the future. If you have any info on 6M I would appreciate it. Band Conditions would be usefull as well. Thanks in advance.

Travis - KB7SEI
bigboss@xmission.com

Date: Thu, 23 Dec 1993 15:23:04 GMT
From: swrinde!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: 6 Meter
To: ham-homebrew@ucsd.edu

In article <2fb140\$e8k@xmission.xmission.com> bigboss@xmission.xmission.com (Travis Tabbal) writes:

>
>Hello everyone, I am thinking of building a 6M SSB Transceiver. I would
>like to know if this is a worthwhile project. I would mainly like to do it
>for the experience of doing it. I would like info of Schematics if
>possible, I could probably design one if pointed to the correct books, but
>would like to not do so if there is something out there that works well. I
>am a no-code Tech and would like to see if I can get some DX with my
>privs. I haven't had time to learn code yet so just want something to play
>with but would like a good radio to use in the future. If you have any
>info on 6M I would appreciate it. Band Conditions would be usefull as well.
>Thanks in advance.

Travis, building an SSB transceiver of any kind is a complex and ambitious project. That's why most amateurs restrict themselves to transverters, amplifiers, or FM/CW equipment. 6 meters is also an in between band where normal HF techniques don't quite work, yet VHF/UHF techniques are too bulky. The *easiest* approach is to modify an old SSB CB set to work on 6 meters. This gives you a good SSB subsystem as a foundation.

If you want to build from scratch, there's a complete SSB transceiver design in the 1977 Handbook. It relies on the MC1496G as a balanced modulator. There are better ways today using hybrid ring mixers, but the current Handbook doesn't offer anything except QRP CW rigs. You might try the RSGB books instead. Or check out Rick Campbell's design published in either QST or QEX earlier this year.

Generally a filter method design is easier to get working correctly than a phasing or Weaver method design. You'll probably want to take as modular an approach as possible to aid in troubleshooting, and to make it easier to add upgrades.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Thu, 23 Dec 1993 16:43:42 GMT

From: library.ucla.edu!europa.eng.gtefsd.com!darwin.sura.net!fconvx.ncifcrf.gov!
mack@network.ucsd.edu

Subject: 6 Meter

To: ham-homebrew@ucsd.edu

In article <2fb140\$e8k@xmission.xmission.com> bigboss@xmission.xmission.com
(Travis Tabbal) writes:

>

>Hello everyone, I am thinking of building a 6M SSB Transceiver. I would

>like to know if this is a worthwhile project.

>KB7SEI

This is a large project so you might want to make it modular enough that that you can use the exciter and receiver parts for other bands. 6m is fairly quiet and will be getting more so till the sunspots improve. Things still happen contests and for meteor scatter but by and large you won't be using your rig on 6m as much as on other bands. I don't know if you are looking for something to build or to get on 6m. Since hams don't seem to have a lot of time to design and debug equipment, it's nice if all the work that one person does (like the thing you are trying to do) can be then reproduced by others (ie publish it in QST, QEX, Comm Quart..). Since transceivers are relatively cheap (TS140 etc) not many hams will want to reproduce your rig, even when you publish it. Most people put a transverter in front of their transceiver and go from there. There aren't many transverter designs for 100W out on 6m (this amount of power is needed to drive big linears). Would such a thing interest you?

Joe NA3T

mack@ncifcrf.gov

Date: 23 Dec 93 22:44:15 +1200

From: munnari.oz.au!comp.vuw.ac.nz!canterbury.ac.nz!chmeds.ac.nz!
spearce@network.ucsd.edu
Subject: 80 M DSB transceiver project
To: ham-homebrew@ucsd.edu

Electronic Australia recently ran an article on a DSB 80 transceiver
with a synthesiser in built.

Does anyone know of a source for the kit for this project
and maybe cost?

Thanks
Stephen

Date: Thu, 23 Dec 1993 18:24:27 GMT
From: swrinde!sdd.hp.com!col.hp.com!csn!boulder!beagle!eesnyder@network.ucsd.edu
Subject: Charging Deep-Cycle Batteries from Automobile
To: ham-homebrew@ucsd.edu

I have been thinking about battery setups for remote HF/VHF
station. From what I have read, the deep cycle marine/RV
batteries are the way to get a good strong 12 volt DC power
supply.

However, I am wondering what the best way to charge
such cells. Can I simply run a set of jumper cables from
my car battery to the cell while I am driving? Do I need any
sort of regulation or will my car's electrical system take
care of this?

Any suggestions or references would be greatly appreciated.
The reading I have done consists mainly of an article in QST
on solar-powered stations... so, of course, it didn't talk
a lot about other ways to charge the batteries.

Thanks,

Eric E. Snyder
Department of MCD Biology ...making feet for childrens' shoes.
University of Colorado, Boulder
Boulder, Colorado 80309-0347

Date: Wed, 22 Dec 1993 22:06:56 GMT
From: library.ucla.edu!agate!msuinfo!netnews.upenn.edu!netnews.noc.drexel.edu!

dunx1.ocs.drexel.edu!dunx1!st92ba44@network.ucsd.edu
Subject: funny reception on my amp (?)curious.
To: ham-homebrew@ucsd.edu

the other night i put together a small amp to drive a small pm speaker that i wanted to use on my sw xtal radio (instead of headphones). anyway, i put the amp on the radio output and it worked okay; it drove the speaker reasonably well on the stronger signals. The wierd thing happened when i was taking it apart to make it more permanent; the antenna lead from outside accidentally hit the ground on my amp (while the power was on) and it picked up a station! (the amp was not hooked to the radio). I was wondering how, just the amp, could get any signal at all....its just a bunch of capcitors and a speaker. I realize its for amplification of a signal and the ant just provided one (i couldn't change channels, just the volume... ..i suppose because the equiv capac. was constant) but it had no crystal, no coil, nothing. any ideas? (just curious).

antonio gatta
st92ba44@dunx1.ocs.drexel.edu

Date: 23 Dec 93 14:54:14 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!sol.ctr.columbia.edu!news.unomaha.edu!
cwis.unomaha.edu!ncc2001@network.ucsd.edu
Subject: Heathkit DX-60B Mod?
To: ham-homebrew@ucsd.edu

zateslo@geomag.gly.fsu.edu writes:
> If you were to try to modify a DX-60 itelf for SSB, you'd have
> little left but the final stage, and you'd have pretty much
> destroyed a nice little CW transmitter.

That would appear to be the general feeling of the replies I've gotten. Oh, well, I can still use it on CW as soon as I can afford a rcvr! :)

> That said, I sure hope nobody is throwing DX-60s (or any other
> vintage ham gear) into landfills!

Well, if anybody out there is going to throw away any working rig because it is old and out of date, just drop me a line here. My father works for a truck company and can get things shipped to and from him for free. Drop me a line, I'm getting divorced and any ham equipment will be appreciated.

73 de N0YBC Michael

--

```
| Michael Fortner   N0YBC           | "What do you want for Christmas, |
| Internet:  ncc2001@cwis.unomaha.edu |   Crow?"                          |
| Packet:  N0YBC@WB0BLR.#SWIA.IA.USA.NA | "I want to decide who lives and who |
|                                           |   dies!"                          - MST3K |
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Date: Wed, 22 Dec 1993 14:49:14 GMT
From: usc.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!uwm.edu!fnnews.fnal.gov!
att-in!att!devildog!newsadm@network.ucsd.edu
Subject: Two meter monitor from NEW Radio Shack WX cube?
To: ham-homebrew@ucsd.edu

Has anyone taken a look at Radio Shack's NEW Weather Cube?
Several years ago they used to have a weather cube that
you could modify to serve as a dedicated monitor for one
or two frequencies on the two meter band (I think the
mod was in QST, anyone know the year and issue?) I'm pretty
sure it was just a trivial modification too (add a capacitor
and tune it??)

The big question:

Does anyone know if the NEW weather cube COULD be (easily)
modified to receive two meters? Same procedure as the old
one? Anyone tried it?

Douglas Quagliana KA2UPW
dquagliana@attmail.com

Date: 24 Dec 93 10:37:22 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!magnus.acs.ohio-state.edu!
wvanhorn@network.ucsd.edu
Subject: Two meter monitor from NEW Radio Shack WX cube?
To: ham-homebrew@ucsd.edu

>Several years ago they used to have a weather cube that
>you could modify to serve as a dedicated monitor for one
>or two frequencies on the two meter band (I think the
>mod was in QST, anyone know the year and issue?) I'm pretty
>sure it was just a trivial modification too (add a capacitor
>and tune it??)

The article was in HAM RADIO, May, 1973, p. 76. I got this info from the index by Didah Publishing. I don't have a copy of the mag.

73, Van - W8UOF

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-----  
! It ain't wot you don't know wot gets you into trouble.      !  
! It's wot you know wot ain't true. - "Mr. Dooley"            !  
!-----!
```

wvanhorn@magnus.acs.ohio-state.edu

Date: Thu, 23 Dec 1993 17:25:12 GMT
From: swrinde!sgiblab!spool.mu.edu!torn!news.cs.uwindsor.ca!
dwillls@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <CIDv9M.Hq@barclays.co.uk>,
<1993Dec21.143219.4967@mnemosyne.cs.du.edu>, <2fapjm\$8aa@psu_075.chem.pdx.edu>
Subject : Re: - - television disruptor - -

Anything with a flyback converter in it will spew out lotsa wideband noise...

--
Michael Dunn
dwillls@uwindsor.ca

Date: Thu, 23 Dec 1993 15:38:37 GMT
From: library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-
state.edu!magnus.acs.ohio-state.edu!csn!yuma!galen@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <1993Dec22.000911.9923@ulb.rit.edu>, <2f8h82\$ipb@crl.crl.com>,
<1993Dec22.234711.17005@ulb.rit.edu>cs.
Subject : Re: Mini-Circuits MAR-6 amp/Filtering the input.

In article <1993Dec22.234711.17005@ulb.rit.edu> jdc3538@ulb.rit.edu
(J.D. Cronin) writes:

>Thanks for all the replies. For 2-meter use, would a bandpass filter
>on the input suffice? I was thinking of picking a generic one from the
>ARRL Handbook, and adjusting the values for 146 mhz.
>73...Jim
>N2VNO

Look at the Toko Helical Resonator filters in the Digi-Key catalog. Toko

also has some that won't require retuning, but their catalog is at my office
and I'm on vacation.
Galen, KF0YJ, DN70

Date: Fri, 24 Dec 1993 01:55:11 GMT
From: newshub.nosc.mil!crash!news.sprintlink.net!direct!indirect.com!
btoback@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <2f8h82\$ipb@crl.crl.com>, <1993Dec22.234711.17005@ulb.isc.rit.edu>,
<Dec23.153837.5790@yuma.ACNS.ColoState.EDU>
Subject : Re: Mini-Circuits MAR-6 amp/Filtering the input.

In article <Dec23.153837.5790@yuma.ACNS.ColoState.EDU>
galen@picea.CFNR.ColoState.EDU (Galen Watts) writes:
>In article <1993Dec22.234711.17005@ulb.isc.rit.edu> jdc3538@ulb.isc.rit.edu
(J.D. Cronin) writes:
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>also has some that won't require retuning, but their catalog is at my office
>and I'm on vacation.
>Galen, KF0YJ, DN70
>
Good idea, Galen! The Toko TK3506 has a center frequency of 145mHz with
a bandwidth of 2.8mHz. It's available from Digi-Key for \$23.53 for one,
or \$117.67 for ten.

By the way, their catalog is free and is well worth having. The phone
number is 1-800-344-4539 (800 DigiKey).

-- Bruce Toback

End of Ham-Homebrew Digest V93 #142

